

**Department of Electrical
Engineering Assignment**

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Course

Details

Course Title: Technical Report Writing

Module: 4

Total Marks:30

Student Details

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Note: Plagiarized work is not acceptable.

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| Q1 | Describe some key objectives which technical writer needs to produce precise, compelling and succinct technical communication material. | Marks 10 |
| | | CLO 1 |
| Q2 | How technical report writing distinguish it from other types of writing? | Marks 10 |
| | | CLO 1 |
| Q3 | It is clear that technical text is not supposed to include most of the literary devices then what technical devices are included in technical writing? Discuss any three. | Marks 10 |
| | | CLO 1 |

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Q1

Technical writing encompasses design documentation, user guides, reference and installation manuals, help desk sheets, tutorials, online documentation and any content which is technical in nature. With the emergence of increasingly varied users, audiences and customers of technical material and content, the roles of technical writers are being redefined accordingly. Therefore, technical writers need to keep some key objectives in mind to produce precise, compelling and succinct technical communication material.

Technical writing takes high-level details and explains them clearly and concisely to an audience.

While the result of technical writing is clear, succinct and simple, the process can be the opposite. The **technical_writer**'s challenge is to transform complicated information into an accessible document. To meet this challenge, technical writers use different strategies.

This article will provide you with a selection these distinct, action-oriented strategies to improve your technical writing.

Understanding Format Requirements

With the advent of the computing age and the proliferation of consumer electronics and Web 2.0 technologies, technical material is now produced in various formats and for various mediums. Understanding formats and the requisite tools to produce content for a particular format or medium is important.

Gleaning Information Intelligently

Gleaning information intelligently and collaborating with subject matter experts, developers, product designers, technical architects, engineers etc. is the key to developing the right kind of technical writing in any format and for any medium.

Structuring Information

Structuring or classifying original matter from experts and product developers and research information from other sources is vital for the logical flow of the end format material.

Conveying Message to Audiences

Any form of technical writing has to communicate clearly and effectively to customers, end users and other audiences.

Articulating Subject Matter Lucidly

Lucid, accurate and clear explanation of the subject matter or product description showcases the skills of an expert technical writer.

Create a Persona

The crux of good technical writing is writing for your audience. The audience needs to be defined in the document planning process and then considered at each step of the writing process. Technical writers know that a tech-savvy boss needs different information about a product than a 73-year-old grandmother. After identifying your audience, refine it further by creating a persona. Imagine the exact person who will be reading your document.

The persona will be obvious if you are writing for a known person, such as your department supervisor. For other documents, the persona can be fictional. Assign your reader a specific age, gender, educational background, career, a story for why they are reading the document, even a hobby. Instead of writing for a theoretical audience, write for a specific, albeit fictional, person.

The more accurately you can imagine your reader, the more accessible your writing will be for them. Instead of wondering if the wording is right for the audience, write and review the wording with this persona in mind. It will be obvious whether or not the text is right for your reader.

Beware of Scope Creep

Good technical writers keep in mind the document's goal at each writing stage. The goal and scope should be clearly outlined in the initial document planning.

During the planning and even the writing process, document content can grow. Technical details are not isolated. They are built on previous developments, and you may want to include supplemental information or additional user instructions. Colleagues may suggest valuable background information or data.

Some extra details are useful. Too many details will cause the scope to creep.

As technical writing strives to be succinct, scope creep creates unnecessary work that ultimately produces a less valuable document for the reader. If you feel the scope needs to broaden, return to the goal. Evaluate if that content is really necessary. Cut it or if necessary, consider separation through appendices and even an additional document.

Writing Should Be Easy

If you're thinking 'writing is always difficult for me,' writing is probably not your real problem. Writing should be easy because the planning process was thorough. The planning process should take up to 50% of overall document preparation time. All key materials, relevant details, and the audience will be captured and organized. The result is your complete document in a condensed format. Writing simply fleshes out this compact version. If you're unclear of how to phrase an idea while writing, reflect on your audience and how they would

want to read it. If you're not sure if a data set should be included, refer to your mind map to see if it fits within it. Any writing question can be answered by a complete planning process.

If the writing is difficult, stop typing and return to your plan. There is at least one aspect of the planning process that needs more development. Once you have a thorough plan, only then should you start to write. And it will be easy.

Be Timeless

A technical document is your contribution to posterity. That's right, you are passing on technical knowledge for readers now and in the future.

Most technical writers focus on today's audience. While very important, these documents often serve future readers, too. A site assessment may not be read again for 30 years until the property comes up for sale. Software instructions act as the basis for the future manual of an updated version.

To write timelessly, always include dates and timelines where relevant. Avoid including time-dependent or temporary information. If you must, explain its current context for future readers. For example, a health and safety report references current legislation. The act is carefully identified so that it can be differentiated from future revised codes. Your document should be clear and comprehensible now and 20 years from now.

Use Attributions

Good attributions are efficient. They allow the reader to reference relevant details without including the information directly. The readers who need that additional information can easily find it, while others can continue on in the document without being buried in background information.

See references as a tool for maintaining a concise and valuable document for your audience.

Use Global English

English is an international language. Writing technical documents in English allows them to be broadly read and shared. However, many readers will be non-native speakers.

In order to accommodate all readers, use Global English. This style of English is logical and literal which makes it more easily understood. It has a strong overlap with **the technical writing principles** of precision and clarity. In addition, writing globally means being aware of content that can be difficult to understand or simply misunderstood. For example, avoiding idioms and the subjunctive, as well as being careful with words that can be both a noun and verb (e.g. display or guide). edX supports learners across the world and follows a very useful **guide** to Global English.

Forget the Word Count

Some writers race to a word count, seeing it as the goal marker. In technical writing, word count is a poor judge of completion.

Technical writing should be concise. The same instructions can be conveyed in 500 words or 5000 words. The better instructions are the ones that are most effective for the reader, regardless of the word count.

Use word count as a general guide, not a rule. Never force words onto a page meet a word count. If you can write the same idea in fewer words, it's better for the reader.

Be Humble

Writing is an iterative process. Through good planning, thoughtful writing, and constructive feedback, you will grow and improve your technical writing skills. Each review offers its own lessons.

Be welcoming of **feedback** from supervisors, peers, and experts. Learn from mistakes, confusions, and comments. Each review session offers an opportunity to **grow as a writer**. Be humble and accept these educational opportunities.

Use Graphics to Illustrate

Graphics can help illustrate your message. In technical writing, the goal of graphics is to help convey information not act as decoration. In our **online technical writing course**, we teach that graphics should be focused on the reader. Poorly designed graphics can confuse readers and do more harm than good. To learn more about adding graphics to your documents see our **article on the topic**.

Conclusion

Technical writing is centered on good planning and audience focus. The above tips provide different perspectives and practical methods to accomplish these goals.

Q2

Technical writing is **different** from **other types of writing** in that it is more informative. The purpose of this **type of writing** is to explain a variety of topics to **other** people. **Technical writing** is commonly seen in how to manuals and **other** pieces that provide direction.

Every type of writing has a goal. There are some forms of writing that are geared to telling a story and there are other forms of writing that are geared to expressing opinions.

The main purpose of technical writing is to provide sometimes complex information. This is the type of writing that will:

- Assist a person with understanding more about a particular item, such as a computer or a new drug or a new piece of technology.
- Explain how an object works or how to complete a project.

Technical writing is targeted to readers who are looking for information on a particular topic. The goal in targeting this group is to make sure that the information provided is clear, concise and easy for anyone to understand.

This type of writing is somewhat difficult for some people as it requires that you are able to translate information that is sometimes hard to comprehend into terms that anyone will be able to read and follow along with, without an issue. While there are different types of writing that are informative, technical writing is the type that most clearly focuses on presenting information in a specific way so that people can use the information for a variety of purposes.

Technical writing, just as any other form of writing, has certain characteristics which distinguish it from other types of writing. It is very different from writing opinion pieces, essays, prose, non-fiction or fiction.

- It is clear and straight forward. If you are interested in technical writing for professional purposes, it is very important to know that this type of writing requires that the writer stick to the subject matter and relay information in a clear and concise manner.
- The language is very direct and straight to the point. The writing will avoid words that people do not understand and will avoid an eloquent writing style.
- It is very detailed and informative. The perfect example of technical writing is a textbook. The written content of most textbooks is geared to providing information by describing the subject matter as fully as possible.
- It is very structured. This type of writing has a very obvious composition that makes it easy for the reader to follow along. Solid structure is needed with technical writing as it allows the audience to easily access the information as needed.

Q3

The 3 Most Common Types of Technical Writing:

1. **Traditional:** Repair manuals, medical studies
2. **End-user documentation:** Electronics, consumer products
3. **Technical marketing content:** Press releases, catalogs

Technical writing opens the door to a career that simplifies complex topics and provides users with valuable how-to guides. Think of technical writing as copywriting's most basic, straight-to-the-point version of organizing facts to educate and explain how to do something. To be honest: this type of writing is tough, because writers act as middlemen between developers and consumers.

Technical communications is a growing field, making technical writers high in demand. As technical writers can earn \$40 an hour, it's critical to understand what the different types of technical writing are, and make yourself more valuable as you connect with employers and freelance gigs. Look forward to an interesting, promising, and challenging career!

1: Traditional Technical Writing

Traditional technical writing is material produced for a mostly technical audience. Examples of this category include appliance repair manuals, programmer guides, medical research papers, engineering specifications, and white papers. (White papers are authoritative guides written for a business or political audience.)

While traditional technical writing sounds broad, pieces of content within this category are specifically written for professional audiences. These experts rely on traditional technical writing for targeted research papers, programming guidelines, and repair manuals.

2: End-User Documentation

Almost every product you purchase has a written explanation of operation. These "how-to" pieces are written to help users understand and operate products correctly. After all, what good is a product if users don't know how to properly use it? Since end-user documentation requires clear and concise instruction, it's important to create content that breaks down technological terms to layman's terms. Specific examples of end-user documentation are as follows:

- **User Help Guides**

When software product users have questions that needs specific answers, they turn to user help guides. These are written to provide clear and sensible answers to common questions that may develop as use of software programs continue. User help guides are broken down into sections depending on the type of ‘help’ needed – allowing users to read ahead or re-read information to make their understanding of a product stronger.

- **Product Manuals**

You know you’ve seen these — and are guilty of adding them to a bookshelf before reading. Product manuals are those small booklets that highlight a product’s main features, general maintenance, and basic operation. Examples of product manuals you’ve heard of include owner’s manuals for cars and operator’s manuals for heavy machinery.

- **Assembly Guidelines**

Since assembly guidelines tell users how to physically set up a product, technical writers are responsible for writing clear and user-friendly, step-by-step instructions. It’s important for these instructions to be written in a way that ensure users can accurately assemble products. Just think: if you used the assembly guide that came with your new entertainment system, you probably would have put it together in half the time!

- **Technical Books**

Similar to user help guides, technical writers are hired to write guides for users to understand the ins and outs of a product; most often software products. It’s critical for these technical books to be accessible and of interest to non-expert users. If you’re thinking of writing a technical book, check out Udemy’s guide on writing a how-to book.

3: Technical Marketing Content

If you have an eye for detail and a way with words, creating technical marketing content is the category for you. Developers’ products wouldn’t be much use if consumers don’t understand how to properly operate them. To avoid this, technical marketing content serves as a bridge for products, consumers, and businesses understand each other.